

The sample tubes were submitted for analysis to the University of Arizona Mass Spectrometry Facility on 11/8/91. Solvent extractions of the tubes were completed using carbon disulfide (charcoal tubes) and ethanol (silica gel tubes).

A second sample collection procedure employed at the analytical laboratory involved a dynamic headspace/cryogenic trap/thermal desorption technique applied to a sample of the screen material in an attempt to enhance analytical sensitivity and to look for compounds that may have co-eluted with the sorbent tube extraction compounds. This sample was also analyzed with the gas chromatograph/mass spectrometer (GC/MS).

RESULTS AND DISCUSSION

GC/MS analysis of the charcoal and silica gel adsorption tubes showed a complex mixture of very volatile compounds which eluted early from the GC. Low levels of phthalates were also detected in the samples. Use of the cryogenic trap technique to further concentrate the early eluting volatiles revealed the major components to be four to seven carbon ketones, with methyl ethyl ketone (MEK) and methyl vinyl ketone (MVK, 3-buten-2-one) being the most abundant compounds. In addition to the ketones, other compounds detected at low levels included aliphatic hydrocarbons, aldehydes, trimethylsilanol, and benzene.

Phthalates are widely used as plasticizers. Physically, phthalates tend to be stable compounds with very low vapor pressures. Physiologically, phthalates represent one of the lowest toxicity classes used in industry. They have generally also exhibited a low order of toxicity in experimental animals.

As a class, the ketones tend to be volatile liquids with characteristic odors. At concentrations greater than 300 ppm (parts per million parts air), methyl ethyl ketone has been found to be irritating to the eyes, nose, and throat. It is also capable of causing nausea at such concentrations. No permanent adverse effects have been noted following exposures to MEK of over 700 ppm. The current threshold limit value for mean 8-hour exposures to MEK is 200 ppm; the short term exposure limit for 15 min. periods is 300 ppm.

Higher order ketones such as MVK tend to be more irritating and have more penetrating odors. MVK has been characterized as having a powerfully irritating odor. Threshold limit values have not been established for MVK.

EXECUTIVE SUMMARY

A sample of degraded PVC window screen material was submitted to Health Effects Group, Inc. for characterization of volatile organic compounds emitted from the material. Employee health related complaints are potentially associated with exposures to the emissions during handling and processing of the degraded screen material.

Volatile emissions from the screens were sampled with two different techniques and submitted for qualitative mass spectral analysis. A number of different volatile compounds were detected during analysis. The major compounds detected were several different ketones, which are generally not highly toxic but can be irritating with penetrating odors.

CONCLUSIONS

Gas chromatographic/mass spectral analysis showed that the primary volatile emissions detected in the head space of degraded PVC screen material were ketones, with methyl ethyl ketone and methyl vinyl ketone being the most predominant. While these compounds do not appear to be acutely toxic, they can be skin and respiratory system irritants with powerfully penetrating odors.

In the absence of information on actual exposure levels to these compounds during handling and processing of the degraded screen material, precautions to preclude excessive skin and respiratory exposures should be taken.

January 15, 1992

Mr. Anthony Gamble
Phifer Wire Products, Inc.
P.O. Box 1700
Tuscaloosa, AL 35403-1700

~~Bob Hoff~~

3-pages

Dear Anthony:

Below is a discussion of the progress we have made in assessing the source of the odor associated with the polymer coated fiberglass screening material you recently sent to us.

In order to qualitatively describe odors believed to be originating from polymer coated fiberglass screen material our laboratory utilized approximately 30 square centimeter samples of various aged and non-weathered screen material cut into 1 cm square pieces as representations of the bulk material.

These samples were introduced into glass vials and sealed with teflon crimp cap seals. The glass vials were placed in a Hewlett-Packard model 19354 Headspace Analyzer which was interfaced to a Hewlett-Packard model 5890 Gas Chromatograph using a Hewlett-Packard model 5971 Mass Spectrometer as detector. The column in the gas chromatograph was a 25 meter HP5. The headspace sampler was set to a total carrier flow of 90 ml/min, with auxiliary pressure set at 1.4 bar. The sample loop in the headspace analyzer had a 1 ml total volume. The split ratio on the gas chromatograph was 1:4, with a column head pressure of 4 psi. The gas chromatograph was operated isothermally at 120 degrees centigrade. The mass spectrometer scanned from 30 to 500 m/z.

Headspace optimization included sampling a mixed composite of aged and non-weathered samples of screen material at temperatures ranging from 50 degrees centigrade to 120 degrees centigrade. It was found that peak height of compounds originating from these samples increased with temperature until 110 degrees. At temperatures higher than this a broad non-specific peak appeared indicating possible degradation of the polymer material.

Analyses carried out on aged and non-weathered samples presented evidence that release of compounds from the samples increases with weathering. That is, weathered samples produced peak heights 10 -

The University of Alabama at Birmingham
309 Tidwell Hall • 720 South 20th Street • OAB Station
Birmingham, Alabama 35294-0008 • (205) 934-7032 • FAX (205) 975-6341

200 times larger than non-weathered samples.

The peaks from the gas chromatograph of these materials exhibited very low retention times indicating low mass, low boiling point, and possibly polar materials. Also, the peak areas were too small to obtain reliable mass spectral identification. However, comparison of these mass spectra with NBS standards indicated the following compounds as tentatively identified:

<u>COMPOUND</u>	<u>CAS #</u>
Ethanone, 1-cyclobutyl-	3019258
3-octan-2-one, 7-methyl-	33046810
1-Buranol, 3-methyl-, acetate	123922
2H-Pyran, 3,4-dihydro-6-methyl	16015115
[2,2'-Bifuran]-5,5'-dicarboxylic acid, 4	5905033
Propanamide, 2-methyl-	563837
1,2-Benzenedicarboxylic acids:	
diisooctyl	27554263
3-nitro	603112
diundecyl	3648202
diisododecyl	26761400
dinaptyl	3648213
Aspidofractinine-3-methanol, (2.alpha.)	2656442

These compounds appear to be oxidation products of monomer material coated onto the fiberglass screen, various phthalates associated with plasticizers used in the manufacture of the polymer, and pigment used in coloring the screen material.

It cannot be overstressed that these are only tentative identifications. In order to further define these materials, a larger sample loop has been installed on the headspace analyzer, and a more polar column has been installed in the gas chromatograph. This should allow us to introduce more of the sample into the gas chromatograph/mass spectrometer, and allow for better separation of these oxidation products. Work is continuing on screen materials and on hand tool materials associated with screen installation.

We are in the process of re-analyzing these samples utilizing the modifications described above. We should have the results these analyses by the end of this week or the first part of next week. I will forward the results as soon as possible.



PHIFER WIRE

P. O. BOX 1700 • TUSCALOOSA

■ CHARLES E. MORGAN
Executive Vice President

June 2, 1992

Mr. Tim Battersby
The Home Insurance
P. O. Box 168
Grand Rapids, MI

Re: Kevin and Co.
Claim Number 262-719639-222

Dear Mr. Battersby:

I was surprised and disturbed to hear that Mr. Chase contends that Phifer Wire was negligent in dealing with the odor problem associated with some of our fiberglass insect screening. I have reviewed our records and spoken with the founders and owners of this company as well as with plastisol engineers and key members of our sales department and, based on that research, will attempt to summarize the history of this problem.

Phifer Wire Products was founded in 1952 and has been the world's leading manufacturer of insect screening for at least the last ten years. We are extremely proud of our record of consistent quality over the past four decades. The cause of the odor coming from the silver-gray screening in the Chases' home was the accelerated deterioration of the product due to ultraviolet sun rays. Prior to 1988, that problem was unknown to this company and even today it is rare.

In January 1988 we changed our plastisol stabilizer in order to make the product environmentally safer. It had never been dangerous to consumers, but the change made disposal of scrap material safer. Though we succeeded in making the product safer, we miscalculated in mixing the plastisol formula for silver-gray screening by not putting enough pigment into it. The result was the material would deteriorate rapidly when exposed to direct sunlight. The odor was associated with this process of rapid deterioration. By the following year, we had had several product failures, discovered their cause, and, in June 1989, improved the plastisol formula (without putting back any dangerous substances), thus ending this problem forever.

Prior to hearing from the Chases, we had replaced deteriorated screening for some homeowners, but not one had complained of any physical effects from the screening (most of these homeowners had the screens mounted on the exterior of their windows so it would be unlikely that the odor would bother them). When I collected some of this defective screen in my office, I noticed that it had

Please Note:

*There are discrepancies
in this "Insurance Letter"!*

*The screens in our neighborhood
with the odor are on casement windows
the screens are in the interior, the window
on the exterior.*

*Also, you might check with Mr. Edwards
of Sentinel. I believe his complaints may have
come to Phifer Wire before the Chase complaint.*

YSL

10-7-92

Mr. Tim Battersby
June 2, 1992
Page Two

a bad odor, but I never heard of any possible physical side effects until I spoke with Carol Chase on October 21, 1991.

Immediately upon learning of this potential hazard, we hired Dr. Meeks to analyze the material and the odors. After intensive research, Dr. Meeks determined that the odor had only an irritant effect and no chronic or long lasting effects. His report is consistent with my phone conversation with Mrs. Chase, in which she told me the symptoms cleared up as soon as the window screens were removed.

This company has no history of making dangerous or harmful products and no experience with liability claims. I have recently spoken with the President and with the C.E.O., who has held that position since the company was founded forty years ago, and they confirmed that neither the company nor any of its insurance carriers has ever paid a personal injury products liability claim. Please feel free to confirm Phifer's record with the "Index System" or with any of our carriers. We have been insured by The Home since 12/31/88, by Liberty Mutual for the three years prior to that and by Cigna prior to 1985. In fact, except for Mr. Chase's letter of April 6, 1991, Phifer Wire has never even received a claim or demand for money damage to compensate for personal injury.

I hope this information will be helpful to you in adjusting this claim. If you need additional information about what happened and when, please give me a call.

Sincerely yours,

PHIFER WIRE PRODUCTS, INC.

Charles Morgan
Charles Morgan

CM:jh

cc: Mr. Walter Gary
Pritchett-Moore, Inc.



COUNTY MICHIGAN
DEPARTMENT OF INSTITUTIONAL
AND HUMAN SERVICES

Daniel T. Murphy, Oakland County Executive
HEALTH DIVISION
Thomas J. Gordon, Ph.D., Manager

MEMORANDUM

July 22, 1992

TO: CAROL CHASE

FROM: NELSON HAYNES, R.S., SENIOR PUBLIC HEALTH SANITARIAN
OAKLAND COUNTY HEALTH DIVISION *N.H.*

SUBJECT: WINDOW SCREENS AT RESIDENCE LOCATED AT 6881 VAIL CT.,
CLARKSTON, MICHIGAN 48348

In March 1990 I conducted a complaint investigation at the above captioned address. Residents were concerned about a foul, acrid odor coming from rooms in direct sunlight. I did agree that there was a strong, irritating odor. Although I could not determine the exact cause I did feel that it was at minimum an extreme nuisance and corrective action should be taken as soon as possible as the residents health could be affected.

If this division can be of any further assistance, please call (3213) 858-1327.

Daniel T. Murphy Oakland County Executive



Robert A. Long, R.S., M.P.H.
Administrative Assistant
Environmental Health Services
Health Division

Department of Institutional and Human Services
Health Division Bldg 858-1333
1200 N. Telegraph Rd., Pontiac, Michigan 48053

2/2/92



PHIFER WIRE PRODUCTS, INC.
P. O. BOX 1700 • TUSCALOOSA, ALABAMA 35403-1700 U.S.A.

■ CHARLES E. MORGAN
Executive Vice President and Corporate Counsel

September 25, 1992

Ms. Karen Manvel
6740 Sun Valley Drive
Clarkson, MI 48348

Dear Ms. Manvel:

I recently learned that you had a problem with window screening that was manufactured by Phifer Wire Products and installed in your home by Weathervane Window, Inc. That screening was manufactured in 1988. A small portion of the screen we made that year degraded prematurely when exposed to continuous direct sunlight. That problem was corrected in 1989 and the replacement screening Weathervane installed for you should last for many years without any problems. If, however, you are not completely satisfied with the replacement screening, please call me on our toll free number (800-633-5955) so that we can address any remaining problems or questions.

Phifer Wire has earned a good reputation over the past forty years because we stand behind our products 100%. We want to preserve that reputation by assuring that every consumer of our products is completely satisfied.

Sincerely yours,

PHIFER WIRE PRODUCTS, INC.

Charles Morgan
Charles Morgan

CM:jh

cc: Mr. Gary Rose
Weathervane Window, Inc.

Note: Mr. Morgan sent this form letter to our neighbors who had their screens replaced after complaining of an odor. Apparently, the homeowners who complained of physical problems did not receive one.

This is my next door neighbor's copy.

STATE OF MICHIGAN



JOHN ENGLER, GOVERNOR

DEPARTMENT OF PUBLIC HEALTH

3423 N. LOGAN/MARTIN L. KING JR., BLVD.
P.O. BOX 30195, LANSING, MICHIGAN 48909

Vernice Davis Anthony, Director

October 16, 1992

Mr. Freeman
Injury Information Clearing House
Consumer Product Safety commission (CPSC)
Washington, D.C. 20207

Dear Mr. Freeman:

Subject: Phifer Window Screens

This follows our telephone conversation of October 9, 1992. We have received some health complaints from citizens who have used window screens manufactured by Phifer Wire Products, Inc., P.O. Box 1700, Tuscaloosa, Alabama 35403-1700. These window screens were distributed prior to June 1989 (between 1988-89) by the Weathervan Window Incorporated, 4th Court, Brighton, Michigan 48116. It is possible that some of the window screens of the alleged batch may have been sold nationwide.

It has been alleged that as a result of interaction with sun rays these window screens change color and emit toxic compounds causing indoor air pollution. As a result, some citizens have complained of some adverse health effects (allergies and chronic fatigue immune deficiency syndrome [CFIDS]).

We will appreciate if CPSC investigate this alleged problem and take suitable actions (report, advisory, etc.). We will gladly cooperate with the CPSC in obtaining materials and information from the concerned citizens. I hope that CPSC will take up this project. Please write and contact me (517-335-8362) for additional information.

I sincerely look forward to hearing from you at your earliest convenience.

Sincerely,

A handwritten signature in cursive script that reads "Kirpal S. Sidhu".

Kirpal S. Sidhu, Ph.D.
Toxicologist
Health Risk Assessment

cc: John Hesse
Harold Humphrey

STATE OF MICHIGAN



JOHN ENGLER, GOVERNOR

DEPARTMENT OF PUBLIC HEALTH

3423 N. LOGAN/MARTIN L. KING JR., BLVD.
P.O. BOX 30195, LANSING, MICHIGAN 48909

Vernice Davis Anthony, Director

November 5, 1992

Mr. David Schmeltzer
Assistant Executive Director
Office of Compliance Enforcement
United States Consumer Products Safety Commission
Washington, D.C. 20207

Attention: Ms. Judith Hayes

Dear Mr. Schmeltzer:

This follows my telephone conversation November 5, 1992 with Ms. Judith Hayes. We have received some health complaints from citizens who have used window screens manufactured by Phifer Wire Products, Inc., P.O. Box 1700, Tuscaloosa, Alabama 35403-1700. These window screens were distributed prior to June 1989 (between 1988-89) by the Weathervane Window Incorporated, 4th Court, Brighton, Michigan 48116. It is possible that some of the window screens of the alleged batch may have been sold nationwide.

has been alleged that as a result of interaction with sun rays, these window screens change color and emit toxic compounds causing indoor air pollution. As a result, some citizens have complained of some adverse health effects (allergies and chronic fatigue immune deficiency syndrome [CFIDS]).

We would appreciate it if CPSC investigate this alleged problem and take suitable actions (report, advisory, etc.). We will gladly cooperate with the CPSC in obtaining materials and information from the concerned citizens. In response to your request, I have enclosed copies of reports of the preliminary chemical analyses of the material from the window screens. Also, enclosed is the address and telephone numbers of the concerned citizen, manufacturer and the distributor. I hope that CPSC will take up this project. Please contact me (517-335-8362) for additional information.

I sincerely look forward to hearing from you at your earliest convenience.

Sincerely,

Kirpal S. Sidhu

Kirpal S. Sidhu, Ph.D.

Toxicologist

Division of Health Risk Assessment

FAX # (517) 335-9434

cc: John Hesse
Harold Humphrey
Mary Golarz

ADDRESSES AND TELEPHONE NUMBERS

Manufacturer

Phifer Wire Products, Inc.
P.O. Box 1700
Tuscaloosa, Alabama 35403-1700
Telephone: 205-345-2120

Distributor

Weathervane Window Incorporated
4th Court
Brighton, Michigan 48116
Telephone: 313-227-4900

Citizen(s)

Mrs. Mary Golarz
6710 Sun Valley Drive
Clarkston, Michigan 48348
Telephone: 313-391-1675



PHIFER WIRE PRODUCTS, INC.

P. O. BOX 1700 • TUSCALOOSA, ALABAMA 35403-1700 U.S.A.

■ BEVERLY C. PHIFER, President

December 8, 1992

Mrs. Mary Golarz
6710 Sun Valley Drive
Clarkston, MI 48348

Dear Mrs. Golarz:

I am sorry I was not in when you called yesterday. I want you to know that the entire Phifer Wire staff, including myself and my sisters, are very concerned about your health problems. Charles Morgan has kept us informed of your situation since you first contacted us last May. Charles is also very concerned and we hope we can all work together to help you identify the exact cause of your medical problems so that they can be resolved.

Our family has been in the screening business since 1952 and, until this past year, we have never had any customers experience reactions to any of our products. I don't know if that fact will be much comfort to you since you have experienced some great discomfort which may have resulted from the odors coming from our screening.

I was greatly relieved to read in Dr. Meeks' report that any allergic symptoms resulting from exposure to those odors should not be permanent but should disappear as soon as the product is removed from the home. We asked the folks at Weathervane to replace all of your screening, at our expense, and we understand that you had aluminum screening installed in September. I hope the symptoms you experienced with the fiberglass screening have all gone away since September. If not, we will certainly investigate further.

If you will send us a description of the symptoms you are experiencing along with a sample of the screening that was previously installed in your house, we will have it analyzed by our toxicologist and evaluated by a medical doctor at the University of Alabama at Birmingham.

Sincerely yours,

Beverly C. Phifer
Beverly C. Phifer

BCP:jh



PHIFER WIRE PRODUCTS, INC.

P. O. BOX 1700 • TUSCALOOSA, ALABAMA 35403-1700 U.S.A.

■ CHARLES E. MORGAN
Executive Vice President and Corporate Counsel

February 23, 1993

Mrs. Mary Golarz
6710 Sun Valley Drive
Clarkston, MI 48348

Via Express Mail

Dear Mrs. Golarz:

Enclosed is a copy of a complete list of all ingredients that were used by Phifer Wire Products in manufacturing the insect screening that was originally installed in your home. In the "INGREDIENT" column, I have listed the name (either the brand name or generic name) for each of the ingredients. The middle column gives a brief description of the ingredient or, in some cases, simply a generic chemical name for the brand name that appears in the left hand column. In the "SUPPLIER" column, I have tried to provide the names, addresses and phone numbers of the suppliers of these various ingredients in case anyone wanted to obtain further information about the ingredient.

I have provided this information to the various toxicologists who have studied this product and the quality of the air surrounding the product. I believe the ingredient list should be considered together with the toxicologists' reports, especially the Clayton Environmental report which we expect to receive soon. Some of the ingredients listed may be toxic if swallowed or inhaled, but may remain harmlessly contained while the product is in normal use.

I hope the enclosed information will be helpful to you and your physicians in diagnosing and treating your health problems.

Sincerely yours,

PHIFER WIRE PRODUCTS, INC.

Charles Morgan
Charles Morgan

CM:jh

Enclosure

The following is a list of all ingredients used in the manufacture of PhiferGlass® silver-gray pvc-coated fiberglass insect screening manufactured between January 1, 1988 and July 1, 1989

INGREDIENT	DESCRIPTION/COMPOSITION	SUPPLIER
Continuous filament fiberglass	fibrous glass consisting of silicon oxides, aluminum calcium, boron & magnesium	PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272 (304)843-1300
Jayflex DINP	Diisononyl Phthalate (benzenedicarboxylic acid)	Exxon Chemical Americas (713)870-8000
Drapex® 4.4	Octyl epoxy tallate	Witco Argus Division 633 Court St. Brooklyn, NY 11231-2193 (718)858-5678
Therm-Chek® 6223	Calcium <u>cadmium</u> zinc stablizer in aliphatic solvent	Ferro Corp. Bedford Chemical Division 7050 Krick Road Walton Hills, OH 44146-4494
<i>REPLACED LEAD</i> Polypeg® E-400	<i>216-641-8580</i> <i>OR 1-800-321-9946</i> Polyethylene glycol ester	Uniroyal Chemical Co., Inc. Middlebury, CT 06749 (203)573-3303
Aluminum Paste	Pigment containing aluminum flake and aromatic solvents	Silberline Mfg. Co., Inc. Tamaqua, PA 18252 (717)668-6050
Black Paste	Carbon black pigment and DINP plasticizer Smyrna, GA 30082 (404)333-8356	Toncee, Inc. 1500 Wilson Way
Thermoguard S	Antimony trioxide	Atochem P. O. Box 1104 Rahway, NJ 07065 (201)499-2403
Oxy 654-H PVC Homopolymer	Ethene, Chloro-Homopolymer	Occidental Chemical Armand Hammer Blvd. Pollstown, PA 19464 (716)278-7021
GEON Resin 123A PVC Homopolymer	Ethene, Chloro-homopolymer poly-vinyl chloride	B.F. Goodrich 6100 Oak Tree Blvd. Cleveland, OH 44131 (216)447-7601

INGREDIENTDESCRIPTION/COMPOSITIONSUPPLIER

GEON Resin 213
PVC Homopolymer

Ethene, Chloro-homopolymer
poly-vinyl chloride

B.F. Goodrich
6100 Oak Tree Blvd.
Cleveland, OH 44131
(216)447-7601

Silicone Fluid
L-45/50

Polydimethylsiloxane

Union Carbide
P. O. Box 38002
South Charleston, WV 25303

Kerosine

Petroleum hydrocarbon

B.P. Oil, Inc.
Gulf Products Division
Midland Bldg.
Cleveland, OH 44115

Kirpal S. Sidhu, Ph.D.
Toxicologist
Michigan Dept. of Public Health
Division of Health Risk Assessment
P.O. Box 30195
Lansing, MI. 48909

April 11, 1993

Dear Doctor Sidhu,

Enclosed you will find the "Ingredient List" sent to me by Mr. Charles Morgan of Phifer Wire Products. This list includes all the ingredients used in the manufacture of the screening material which apparently gave off the gaseous emissions.

In the letter dated Feb. 23, 1993, which was sent to me along with this list, is the interesting statement "Some of the ingredients listed MAY BE TOXIC IF SWALLOWED OR INHALED, but MAY remain harmlessly contained while the product is in normal use".

As a note, normal use in our home included constant removal of the screens when it rained (the screens were inside casement windows) and wiping them down with a bath towel (along with drying the window frame, furniture, and rug), and leaving them out to air dry. Taking them in and out was normal for me.

My concern is still in the fact that Mr. Morgan of Phifer Wire Products stated that there apparently is no possible way of tracking down where this defective screening material is. It seems that distributors are still utilizing it as part of their inventory. As one example, neighbors who had their screens replaced approximately 6 months to 1 year ago are complaining of the odor again in their REPLACEMENT screens. According to the 1992 D&B report, Phifer Wire Products has 5000 distributors. The number of households effected by this "hazardous error" could be alarming! A number quoted by Mr. Morgan regarding households they supply was in the millions. Like other households, after several screen exchanges, our home is without screens.

I still feel there's a significant concern that should be addressed. According to his knowledge as an Executive Vice President and Corporate Counsel, Mr. Morgan has stated that, in the 40 year history of Phifer Wire Products, there has been no toxicology studies done on any of their screening material prior to the recent reports done on the "miscalculated" screens (which were still being distributed for the 18 months period they were working on a new formula). My concern is that 5 years ago, because their scrap material was labeled as HAZARDOUS, P.W.P. decided to change the formula due to the cost. In summary, as I noted in my recent phone conversations with Mr. Morgan, before 1988, several factors are significant:

- Apparently - Before 1988, the list of INGREDIENTS was basically the same as the enclosed list, EXCEPT TIE(?) BASIC LEAD PHOSPHATE (that is what I wrote in my notes - a white powder) was used in the pigment. Presently CADMIUM has replaced the LEAD.
- Around the landfills that are now considered HAZARDOUS (Apparently because of the LEAD content in their scrap), Phifer Wire Products were required to "drop wells" from which they monitor the waste and send the results to a "State equivalent of the E.P.A."
 - With the LEAD pigment being white in color, they had to "put more pigment into it, in order to make it stronger".
 - Another statement - "the screens should last 5-6 years". What happens to the condition of the screens after that time period and exposure to the elements.
 - Mr. Morgan stated that the BENZENE BEING EMITTED was NOT THE TOXIC FORM!

It would seem advantageous if someone took the initiative to test their "old screen formula" to determine if there's a possibility that "gaseous emissions" or particles are negatively effecting unwary households across America! According to the letter to Mr. Battersby of Home Insurance Co. regarding one of our neighbor's claims, Mr. Morgan comments that P.W.P. has been the WORLD'S leading manufacturer of insect (the holes are too small for bugs to get through) screening for AT LEAST the past 10 years. With their products extending beyond just home screens, it would seem logical (even to this now disabled nurse), that this "situation" could be one of great magnitude.

Be assured, Dr. Sidhu, that the families who have had the air quality tested per the recommendation of your department, are grateful. I, personally, appreciate the time and consideration that both you and Mr. Hesse have granted me. I also realize, as you recommended, that the federal government should be involved in this precarious situation. Your attempts, along with Senator Riegle's, to alert the Consumer Product Safety Division were prudent. However, my instincts tell me that these attempts, along with the air quality testing will prove to be inadequate. It's perceivable how "State funding" can restrict your efforts. Our family would like to thank you and your staff.

The question now is how to proceed. To date, I'm still awaiting the results of the air quality testing and toxicology studies that Clayton Environment started in January. The management of Phifer Wire Company was considerate in financing the tests which I requested. Believing in their sincerity that they wish to ascertain why my husband, children and I (and other families whose home were also tested) were effected by these gaseous

emissions. My family still considers it a miracle that my functions of walking, talking, and return of my cognitive abilities began 6 days after the odorous screens were removed. Having literally been saved from death, but still disabled, I feel a unique responsibility for my fellow human beings.

In this letter, I have only utilized information that was related to me by a representative of Phifer Wire Company, or was documented in their correspondence. I believe you understand that my pursuit of this issue is not for financial gain, and I certainly do not wish to malign a company's reputation. I only wish the truth to be told!

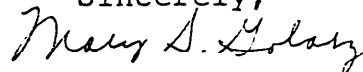
There are two interesting facts that are significant. First, our family has lived in 3 different homes in the past 15 years, located in various parts of North America (California, Georgia, and Michigan), and they all had Fiberglas screens. This is the first time in those 15 years that our home has been without any screens. After moving into our home in California (the first home with Fiberglas screens), I developed respiratory problems and was diagnosed at Loma Linda University as having "Asthma and Emphysema". After several attempts over the years to discontinue my daily 300mg dose of Theodur, I never succeeded beyond 1-1½ days. Presently, I have been totally off this medication for *FIVE* weeks. Our three children have been treated for asthma since we've had the odorous screens. Our 2 eldest children are in college, but our nine year old son has not had an asthma attack since the last of the screens were removed.

The second consideration is information that comes from a very reliable source. It is essential that the screening material be exposed to direct sunlight (Ultra Violet rays) in the testing for gaseous emissions. The day that Oakland County did the air sampling in our homes, it was a typically gloomy December day in Michigan. When the original odorous screens were in place in our home, on a sunny day, one could actually see (and smell and taste - before I lost those senses), the gaseous emissions.

Enclosed you will find a list of symptoms which "seemed" to be prevalent during the time period our home in Michigan had screens in place.

I hope this update is helpful to your department. Again, thank you for your consideration.

Sincerely,



Mary S. Golarz

cc: Senator Donald W. Riegle, Jr.
Senator Sander Levine
John Hesse
Harold Humphrey



PHIFER WIRE PRODUCTS, INC.

P. O. BOX 1700 • TUSCALOOSA, ALABAMA 35403-1700 U.S.A.

■ CHARLES E. MORGAN
Executive Vice President and Corporate Counsel

April 16, 1993

Mrs. Mary Golarz
6710 Sun Valley Drive
Clarkston, MI 48348

EXPRESS MAIL

Dear Mrs. Golarz:

Enclosed is a copy of the draft report from Clayton Environmental on the "Indoor Air Quality Evaluation" conducted in your home and two other homes in the Detroit area. The study found no unusual levels of "volatile organic compounds." I believe the screening had long since been removed from your home, but in the home in Waterford, twelve screens had been stored in a small room with a temperature of 82° so there must have been a good concentration of any emissions that came from the screening.

I noticed that the hygienist did not address your question regarding "heavy metals." Since this is only the draft report, I will ask them to address that question in the final official report. I did raise that question with the Arizona toxicologist, Dr. Crutchfield, and he said we did not need to worry about the presence of any heavy metals in the screening because they could not "volatilize" and, therefore, there is "no mechanism for them to enter your body."

I hope the information obtained through this air quality testing will be helpful to you and your physicians.

Sincerely yours,

PHIFER WIRE PRODUCTS, INC.

Charles Morgan
Charles Morgan

CM:jh

Enclosure

cc: Gary Rose
Weathervane Window, Inc.

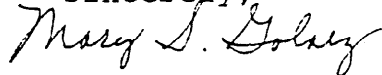
Mark DeZwarte
Alumaroll Specialty Co., Inc.

suggested that it would be advantageous if the University of Michigan became involved.

Many households in our development have had and are still having problems with their screens. Of those who have sought medical aid at your facility, one of my neighbors who was exposed to the same possible toxins as I, is still seeking a diagnosis. Mrs. Lisa Kelley has given me her permission to pass her name on to you. As a very concerned friend who watched this vibrant mother and teacher become debilitated after moving into a home with the odorous screens, I'm hoping that your staff will show empathy regarding her health status. Lisa was first treated for Lymes Disease, sent by U.of M. for consult at Mayo Clinic (Without apparent results). She is presently undergoing testing ordered by Dr. Feldman, a specialist in Neuro-Muscular problems at University of Michigan.

If I can be of any assistance to your staff, please feel free to contact me. My phone is 313/391-1675 (Clarkston, MI)

Thank you for your time and consideration.

Sincerely,

Mary S. Golarz

cc. K.S. Sidhu, Ph.D.
cc. Clifton Crutchfield, Ph.D., C.I.H.

Senator Ringer
Senator Levin

Enclosures

If you would like me to discuss the possible health effects of these compounds with any of your customers, please let me know and I will be more than happy to do so.

Sincerely yours,



Robert G. Meeks

June 15, 1993

Dear Dr. Sidhu,

First of all, thank you for your concern regarding my debilitated health status when you called last time. I'm felling better now, but apologize for the delay in sending the enclosed material.

As to your request for the names of homeowners who have received aluminum replacement screens in Pine Knob Village, I understand the process is not completed. Tomorrow Henderson Glass is coming to our subdivision to pick up my neighbor's screens. Since I have our neighbor's key and will be letting the service men in their house, I plan to ask some questions. If they don't recognize me from the newscast and "clam up", perhaps I'll get more information. When I spoke with Carole Chase she seemed to be more informed as to what homeowners have exchanged their screens. I don't get out much and haven't been involved in the Homeowners Assoc. activities, so I'd appreciate it if you wouldn't mind contacting one or the other homeowners who would be more helpful to you. As a person with authority, Dr. Sidhu, you'll have more success than I.

Kevin Chase, Carole's husband, was the fellow interviewed by CBS on the tape. The Chases are both concerned over the health problems the odorous screens may have caused their children.

Chase's phone number is 313/391-3972 and work is 623-2120

Nelson Haynes did the investigation on the Chase's complaint of the odor in their home in March of 1990 - a copy of which I've enclosed.

Other sources that may be able to acquire the information you need would be the officers of the Home Owners Assoc. President is Robert Hoff - phone 391-4712. Off the record, Robert and Janna Hoff have apparently settled with Phifer Wire Products regarding health complaints, so the best person to contact is the ^{Treasurer} Secretary of the Assoc. - Patti Karlewski - phone 391-2284 (Patti should know all the new neighbors because ^{SOMEONE TOLD ME THAT} she is making up the new Telephone Directory of residents of Pine Knob Village).

By now your office should have received Dr. Wagner's report, but I've enclosed a copy anyway.

The verbal phone report to me by Clayton Environmental's toxicologist that the 1992 screening material from Phifer Wire Products and the 1989 screening material "off gas the same" prompted the NBC report. The only error that I noticed in the enclosed dynamic chamber analysis report is the fact that we (the residents) MOVED into our home in Nov. of 1988. The odorous screens were not delivered by Weathervane until May of 1989.

Again, Dr. Sidhu, thank you for your time and consideration.

Hope your colleagues are under control!

*John C. ...
Phifer Wire Products*

Sept 15, 1993

Dear Dr. Shiller,

By the time you

receive this note, I hope

to have more information.

I also plan to contact you

by phone.

I am sending John here this

some note.

Respectfully,

David. Hovary